

BOOK REVIEW

Australian cicadas. M.S. Moulds. 1990. 217 pp., 24 colour plates, and numerous illustrations and maps. Price: \$39.95 (plus \$3.00 postage and packaging).

As noted in the preface, cicadas are familiar summer insects to most Australians, yet no previous comprehensive text has been produced. This book is thus a timely publication, being intended as a comprehensive guide rather than a monograph. It has surely succeeded in this aim and should amply fulfil its purpose of popularising cicadas, and rationalising their taxonomy and identification for both amateurs and more serious workers alike.

The book is far more than a synthesis of published data, the author having brought together an impressive body of new data, much of it his own. One very obvious example is embodied in the distribution maps, the first time meaningful distribution patterns of our cicadas have been produced. Many older incorrect records have been clarified. Another innovation is the attempt to stabilise a set of common names, including introduction of new names where not previously available.

Part I of the book provides introductory chapters (again including new data) dealing with such topics as life history, predators, adult structure and function (including valuable diagrams showing basic morphological terminology), sound production and hearing, principles of classification and nomenclature, and cicada classification. The final chapter concludes with a very practical review of collecting techniques and preservation of material, and contains numerous helpful suggestions and hints.

Part II, the major part of the book, systematically treats the species, genus by genus (the generic order following the classification listing on pp. 31-32). Each genus is introduced with outlines of distribution, characters, and ecology. Under each species is listed common name(s), cross-reference to plate numbers, synonymy (where appropriate), distribution, habit, brief adult descriptions and notes on songs and life histories (these being detailed for a few of the more interesting and/or better known species). A useful aspect for potential cicada hunters are references to specific localities where some of the more localised species are likely to be found. One criticism concerns the apparently inconsistent order in which species are described in each genus this is neither alphabetic nor obviously related to natural species groups, nor in order of date of description; a comprehensive index, however, does in part offset this criticism.

The species descriptions cover 142 species. The formal listing of Australian cicadas is 202 species, the remaining species not described in the text being either listed within the appropriate genera and their

status noted, or synonymised with existing species. In most cases, these remaining species are known from too few specimens, often only the type. All but 16 of the described species are illustrated in 18 colour plates using set specimens; for many species both males and females are shown. The quality of these plates is excellent, with accurate colour reproductions. In fact, the plates are of such quality that most, if not all the illustrated species will be readily identifiable from the plates alone. It thus seems a great pity, at least to this reviewer, that 16 of the described species were not included in the plates, and does constitute a slightly disappointing aspect of the book. An additional 5 colour plates, all of excellent quality, illustrate various aspects of life history, with the final plate devoted to a selection of nymphal exuviae; the latter emphasises the range of size, colour and shape of cicada exuviae.

The classification followed at the species level is sensibly conservative (for a guide) in the sense that some of the smaller species certainly represent species complexes. Examples occur within *Pauropsalta encaustica* (Germar) and almost certainly within *Cicadetta waterhousei* (Distant) and *C. landsboroughi* (Distant). Other examples undoubtedly exist. A number of important taxonomic changes are made, however, and include new tribal placements, new synonymies (mainly at species level, but two at generic level), new generic combinations, several revisions of status, and the arguable reinstatement of a name not used since 1852 (*P. circumdata* (Walker) p.317).

The book is clearly a landmark publication in the study of the Australian cicada fauna, and must surely be a highly significant contribution to Australian entomology on general. The only comparable overseas volume is that published on the Japanese cicada fauna. The book is clearly written and very well illustrated and produced; the colour plates are certainly the highlights of the book. Typographic errors are few; stippling is missing on the map on page 165. The book concludes with an informative glossary, bibliography and comprehensive index.

Australian cicadas is most highly recommended to all persons with interests in cicadas, and with the wealth of new data presented it should make it relevant to entomologists specialising in other groups. There is much still to be done on Australian cicadas, with many species poorly known, many undescribed, and the documentation and understanding of their songs to be undertaken. This book should stimulate such studies. It is to be hoped that the book may also stimulate similar volumes dealing with other conspicuous groups such as the Odonata, Coleoptera, Diptera and Hymenoptera.

A. Ewart
Department of Geology
University of Queensland